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Get Connected

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Use the audio, video, and additional data storage ports available when connecting your Moxi 3012 to the TV.

System specifications

The following table lists the specifications for the Moxi 3012.

Table 2: Moxi 3012 specifications

	Quantifier
Model number	HD DVR 3012
Power supply	• Line input voltage 110 V to 125 VAC • 1.6 amps • Frequency 50 Hz to 60 Hz
USB power (front)	One USB 2.0 connectors, 5 V, 500 mA
USB power (rear)	One USB 2.0 connectors, 5 V, 500 mA
HDMI power	5 V, 55 mA
IEEE 1394	One large 4-pin

Table 2: Moxi 3012 specifications (Continued)

Feature	Quantifier
Operating temperature	0 degrees Celsius to 40 degrees Celsius (32 Fahrenheit to 104 Fahrenheit) from 5% to 90% non-condensing relative Do not operate the Moxi 3012 at extreme hot or cold temperatures even within this range. Doing so can result in damage to the Moxi 3012 and/or other property and possibly personal injury. Please refer to the Safety Information for more instructions.
Dimensions (WxHxD)	17”W x 3.2”H x 12”D
Weight	Approximately 10 pounds

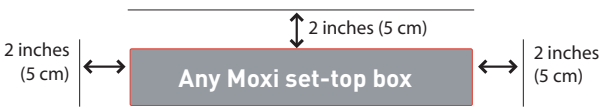
Before connecting

Before installing, the Moxi 3012 installation environment must meet the following physical requirements:

- Locate the Moxi 3012 within six feet of a power outlet.
- Do not use an extension cord, but rather use a power strip with surge protection.
- Make sure the infra-red receiver on the Moxi 3012 and the remote are free from obstructions, such as furniture and doors.

Ventilation requirements

To prevent overheating, allow adequate ventilation and airflow around the Moxi. The Moxi 3012 requires at least a two-inch (5 cm) clearance on top and all sides with airflow to the rear.



See the Regulatory Information and Product Safety Information and Warnings document for more important safety and regulatory instructions and notices.

Available ports

Before connecting the Moxi 3012, consider the equipment to which it will be connected. Is your TV standard definition (SD) or high definition TV (HDTV)? Is there a receiver? If so, does it accept S/PDIF? Are you connecting an external storage device? If so, is it eSATA?

The characteristics of the connections offered on the Moxi 3012 are listed in table 3 (video cables), table 4 on page 54 (audio cables), and table 5 on page 55 (external hard drives).

Table 3: Video cables, starting with highest quality connection

Connector shapes	Cable type	Description
	HDMI	A digital audio and video connection capable of displaying 480i, 480p, 720p, and 1080i video resolution. The TV must be HDCP-compliant. If your TV has a DVI-D port but no HDMI port, you may use video output from the Moxi 3012 with an HDMI to DVI conversion cable. If an HDMI cable or an HDMI to DVI conversion cable is used along with an intermediate device such as an audio/video receiver, video might not be passed through the intermediate device to the TV. If this happens, connect the Moxi 3012 directly to the TV. When configuring 480i, the output connection is automatically routed to the port into which the TV is plugged. You can also have video out from an HDMI cable and an analog port.

Table 3: Video cables, starting with highest quality connection (Continued)

Connector shapes	Cable type	Description
	Component	A three-wire analog video connection capable of displaying 480i, 480p, 720p, and 1080i video resolutions from the Moxi. Component is the most user-friendly HD and standard video connection for the Moxi.
	S-Video	An analog video connection with better quality than Composite. S-Video is capable of displaying 480i video from the Moxi.
	Composite or RCA	An analog video connection. Composite supports 480i video output.
	IEEE 1394	A high-bandwidth digital connection, sometimes called FireWire®. The Moxi 3012 provides an MPEG 2 audio and video stream for recording or display on a digital device in the same resolution as the broadcast. No user interface graphics appear (like, Moxi Menu, flip bar, and so forth) nor is there menu audio.

Table 4: Audio cables starting with highest quality connection

Connector shapes	Cable type	Description
	S/PDIF (optical)	A digital audio connection that carries high-quality Dolby Digital audio. No need to use an S/PDIF cable, if using an HDMI video cable connection (transmits both video and audio).

Table 4: Audio cables starting with highest quality connection (Continued)

Connector shapes	Cable type	Description
	RCA	An analog stereo audio connection. No need to use an RCA cable, if using an HDMI video cable connection (transmits both video and audio).

Table 5: Data storage cables starting with highest quality connections

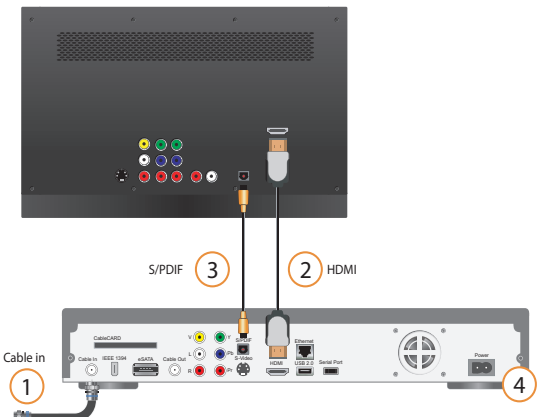
Connector shapes	Cable type	Description
	eSATA	Transfers data at a rate of 2400 megabits per second to and from external hard disks and optical drives. Your actual rate of data transfer can vary.

Connect to the TV and receiver

The Moxi 3012 supports multiple types of audio and video connections. It is recommended that you use the highest-quality connection supported by both the TV or audio receiver and the Moxi.

Before installing or connecting the Moxi 3012, review all instructions and the Regulatory Information and Product Safety Information and Warnings document.

Do not plug the Moxi 3012 into a power source just yet.



1. Place the Moxi 3012 in a well-ventilated open area near the TV and audio receiver (if used), and then connect the incoming coaxial cable to the Moxi.
2. Install one of the following video connections (refer to the previous figure):

- For HD and supported TVs, connect an HDMI cable between the Moxi 3012 and the HDTV (refer to the previous figure on page 56).

If an HDMI cable or an HDMI to DVI conversion cable is used along with an intermediate device such as an audio/video receiver, video might not be passed through the intermediate device to the TV. If this happens, connect the Moxi 3012 directly to the TV.

- If an HDMI connection is unavailable, connect component (YPbPr) cables for HDTV.
- For televisions where HDMI or component is not an option connect an S-Video cable.
- When the previous options are unavailable, use a composite video cable connected to the V port.

For complete list of available connections see, table 3 on page 53.

3. Install one of the following audio connections (only if you are not using HDMI):
   - For digital audio, connect an S/PDIF cable to the Moxi 3012 and receiver or TV.
   - For analog audio to the TV, connect composite stereo cables between the TV and the L and R ports.
   - For analog audio with a receiver, connect composite stereo cables between the receiver and the L and R ports.

For complete list of available connections see, table 4 on page 54.

Do not connect Moxi 3012 to a switched power source. Doing so increases the chance that the Moxi 3012 is turned off and is not able to record programs as scheduled.

Connect archiving components

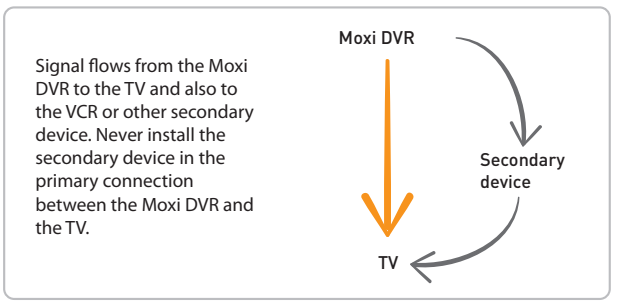
To add components to the TV connected to the Moxi, such as a DVD-recorder or VCR, refer to the manufacturer's documentation for each device.

Copy protected programs cannot be archived to a VCR and may not work with a DVDr.

When installing any secondary device, such as a VCR, do not insert the device in the primary signal path between the Moxi 3012 and the TV, as this may affect the video and audio displayed on the TV. Instead, use a secondary video input to the TV for the VCR (see the following figure). If the content is copy protected, the picture may still appear distorted.

As previously noted, content providers may protect their content with copy protection technologies that limit or prohibit the copying or viewing of their content. If the content is protected by digital copy-

right protection systems, the picture on the additional component may appear distorted or not at all.



You can connect a secondary, digital monitor using the IEEE 1394 port, but the monitor will not display the Moxi Menu, any other user interface graphics, or the playback of recorded TV stored on your Moxi 3012 (see *IEEE 1394 Connectors* on page 60).

Archiving simplified

The Moxi 3012 permits personal archiving subject to all applicable third party limitations. To archive a program, you must play back the recorded program while recording it to a connected recording device (such as a VCR). When recording to a VCR from any port, all on-screen activities are recorded. This includes channel changes, navigation of the Moxi Menu, system sounds, and playback actions (pause, stop, rewind, and fast-forward).

Choosing the archive connection

Variations in VCR and TV technology present many connection options. Determine which connection is used between the TV and the Moxi, and then use an alternate connection to the VCR.

When selecting the connections, consider the video resolution.

- For HD programming, use a connection that supports 720p and/or 1080i.
- For standard definition (480i), use any video connection except the one used by the TV. See the following table for the resolutions supported by each connection.

Table 6: Video connections and supported resolutions

	480i	480p	720p	1080i
HDMI	X	X	X	X
Component (YPbPr)	X	X	X	X
IEEE 1394	X	X	X	X
S-Video	X			
Composite (V, L, R)	X			